

# professionally SPEAKING

## GIVING A TECHNICAL PRESENTATION

Speaking is many people's greatest fear. But millions of presentations—some brief, others longer and more formal—are given in business and industry every day. You may be called on to give one of them.

Critical to the success of your presentation is having a clear vision of your purpose. Most technical presentations are designed to inform; others may discuss a specific issue, trend, or topic, or may persuade colleagues to see a different point of view or accept some organizational change. Engineers will often get together to work on solving a problem, and many technical presentations are designed to instruct or train. Finally, some presentations are meant to inspire those in attendance or just to entertain them. The title of your presentation must reflect the purpose of your presentation.

Most of the time, you will be making a presentation to an audience you know very well, such as co-workers or employees within your organization. But whatever the situation, it is important to give some thought to analyzing the audience. We all have attended presentations where the presenter talked over our heads, covered material that we already understood, or just did not relate the presentation topic to our needs or interests.

When analyzing your audience, you must keep a number of factors in mind. What is the experience and educational background of the audience? What is the gender or cultural mix? What is the average age? (More-mature audiences generally will question the presenter or take issue with points being made, whereas less-mature audiences tend to accept what is being said more readily.) What are the job-related responsibilities of your audience? This is critical information, because knowing the responsibilities or job titles of your audience members will influence the points you will stress as well as your choice of illustra-

tions and examples. Does anyone in your audience have special needs? Should issues or topics be avoided when addressing this audience? Can any members of your audience serve as special resources?

Just standing up and reading the entire report is a poor strategy. Participants attending such a presentation would likely become bored and have difficulty focusing on the information; it's better to use supporting media (such as transparencies, computer-based projections, flip charts, and

Don't just stand there and read; you have to have a strategy.

slides) to illustrate essential points. This illustrated presentation might then be followed by a discussion about the report's implications. Using several strategies or methods appropriately will help participants concentrate throughout your presentation.

In addition to illustrated presentations and technical demonstrations—which present step-by-step procedures for equipment, tools, or materials—methods such as brainstorming, case studies, and role playing should be considered. Discussions, where most of the information comes from the participants, and team presentations, where each engineer assumes responsibility for planning specific parts of the presentation, are often very useful.

Also important is how you select the appropriate strategies for your presentations. You probably shouldn't use the same combination of strategies each time you make a presentation. A given mix may be very effective for one presentation but ineffective for another. Also, if all of your presenta-

tions begin to look and sound the same, both you and your participants will become bored. The strategy should be appropriate for the topic.

What the participants know about the topic is another consideration. If your audience is familiar with your topic, you can use more brainstorming, discussion, case studies, and role playing. If participants have a limited awareness of the topic, an illustrated or team presentation would be better. Consider, too, how much participant input and interaction is needed. Many presentations are based on input from participants as opposed to the presenter being the source of all information.

The number of participants attending your presentation can have a dramatic effect on your selection of strategies. Many technical presentations involve a small number of participants (usually 10 to 15). As the size of your audience increases, some strategies become less appropriate; if 30 or 40 participants attend your presentation, case studies and role playing, for example, may prove unwieldy.

Finally, you should consider how much time is available for your presentation. If your time is limited, approaches such as brainstorming, discussion, and role playing will be difficult to fit in. This is true for technical demonstrations, too, since you will need time to demonstrate the procedure and the participants will need time to practice it. However, if you are given two hours for a presentation, you should build in several strategies to provide some variety.

Can you imagine two hours of straight lecture? Neither can your participants.

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